DOCUMENT RESUME

ED 164 480 SP 013 415

AUTHOR Stacy, Mona; Mitchell, Bruce
TITLE Preparing Gifted Leaders for a Futuristic Society.
PUB DATE 78
NOTE 5p.; Small print may be marginally legible

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Academically Gifted; Change Agents; Creative Ability; *Creative Thinking; Decision Making; *Elementary Education; *Futures (of Society); *High Achievers; Imagination; *Leadership Training; Learning Modules; Self Actualization

ABSTRACT

An advanced learning center for gifted students from the third through the eighth grade is described. The goal of this program is to provide children who have leadership potential with a curricular environment that allows opportunities to probe, experiment, hypothesize, synthesize, and analyze in order to act and interact with others. This same environment emphasizes the creative, imaginative interaction; the why as well as the how--giving encouragement to the development of an individual who possesses high academic aspiration. All activities written within the future-aimed curriculum are geared to assist the learners to : (1) understand themselves; (2) know the reasons for accepting or making change for the future; (3) understand the process of inventing alternative futures; and (4) accept the responsibility for action in initiating alternative futures. Two sample learning activities are outlined to clarify the teaching methods used in this kind of instruction. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

GIFTED PROGRAMS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Bruce Mitchell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

ED164480

Preparing Gifted Leaders For a Futuristic Society

Mona Stacy and Bruce Mitchell

"Other generations believed that they had the luxury of preparing their children to live in a society similar to their own. Ours is the first generation to have achieved the Socratic wisdom of knowing that we do not know the world in which our children will live."

John I. Goodlad

Intellectually gifted students in Yakima, Washington's Advanced Learning Center are presently involved in an exciting future-aimed curriculum which focuses on "Futures" and "Leadership." It is entitled *Washington's Futuristic Learners Program*, and it offers third through eight grade gifted students a means of breaking away from an educational structure which puts emphasis on information gathering in the context of source-centered activities. Through the interdisciplinary approach to "futures" study, the gifted students are provided with a curricular environment which allows opportunities to probe, experiment, hypothesize, synthesize and analyze in order to act and react with others. This same environment emphasizes the creative, imaginative interaction; the *why* as well as the *how* — giving encouragement to the development of the individual who has developed a zest for learning.

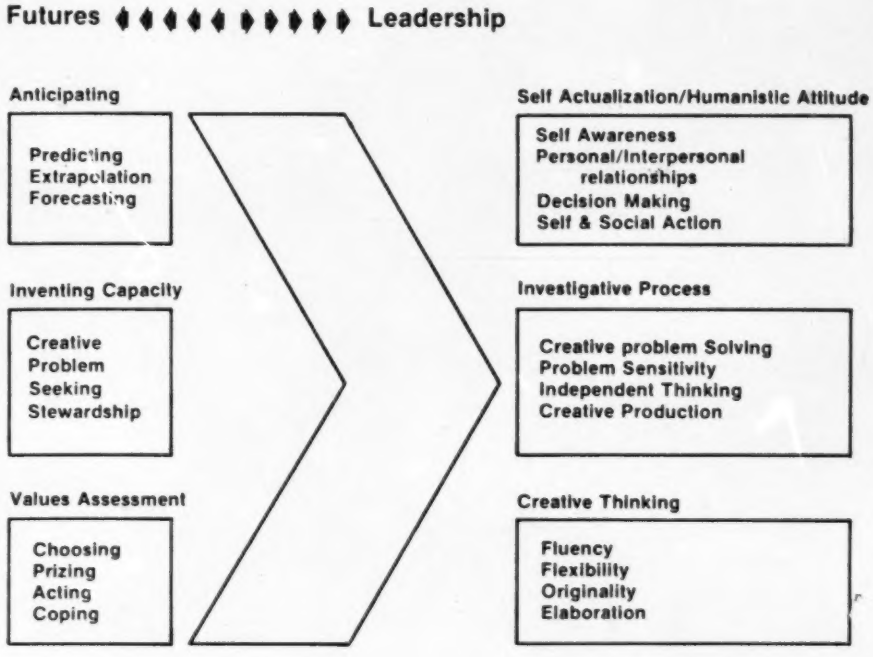
All persons have a future, *and* the students in today's schools will spend most of their lives there. It takes little imagination to anticipate what impact intellectually gifted students can have on the future, provided they receive the proper motivation and reinforcement. As they become responsive to the needs of our present generation and sensitive to those of the next, they cannot afford to be neglected in the learning/teaching process.

Education based solely on the past and the present is no longer an adequate preparation for life in the future. Tomorrow will not replicate today. In the study of the future, often termed "futurism" or "futuristics," the student is asked not only to be sophisticated in many traditional content areas but to be knowledgeable in the rapid pace of change and in the process of change itself.

Futurists have indicated that these changes will quite likely require bold, responsible, and imaginative decisions on the part of tomorrow's national leaders. Limits to various kinds of growth and alternate resources are foreseeable and will require different kinds of thinking processes and attitude development. Thus it can be seen that new leaders will need to possess imaginative and unique skills which often are lacking in present and past leaders.

FIGURE I

A MODEL FOR DEVELOPING LEADERS THROUGH FUTURE-AIMED INSTRUCTION



Yakima Public Schools

An instructional model has been developed by Yakima Public Schools personnel to assist the classroom teacher in developing and nurturing the futuristic/leadership skills so vital to gifted/talented students in particular, and the entire society in general. This model was created through a grant from the United States Office of Education, Office of Gifted and Talented for the school year 1976-77. The future-aimed instructional model depicted in figure 1 indicates those unique skills or elements that may be crucial for future leaders in the nation to possess in order for them to function in a more humane and creative manner.

As futuristic learning activities are developed by classroom teachers, skills identified should have many interweavings from both the *futures elements* and leadership elements depicted in both areas of the model. The teachers, knowing their students, will make the decision as to which elements become the major focus in any activity.

All activities written within the future-aimed curriculum should assist the learner to:

1. understand one's own self;
2. understand one's attempt to accept or to make change for the future;
3. understand the process of in-

SP 013 415

venting alternative futures; and
4. understand and accept the responsibility for *action* in initiating alternative futures.

The total instructional model also includes a foundational unit which is a designed process of sequenced exercises eliciting creative thinking from its participants. The process is necessary for enabling students to become aware that conditions *can be changed* and providing them with *guidelines for imagining* future alternatives. Imagining, as a creative approach to thinking about the future, allows us to generate ideas, liberate ourselves from the demands of today, and reflect about what might be tomorrow. With our imaginations we can design many possible futures. We can take a mind leap into the futures that we might choose to build. Imagining is a form of inventiveness and originality that will give the freedom to entertain many "futures."

As the participants work through the set of exercises, they begin to distinguish desirable futures. Throughout these initial exercises creative alternatives emerge which inspire, provoke, and allow student future-planners to walk ahead of themselves and others. Eventually the students are led to the true "here and now" of the future design where they must prove their alternative futures can actually exist. Imagination has left the dreaming stage and actions must be exhibited.

Interaction and communication skill building are areas of emphasis in developing leadership.

After the students have internalized processes for projecting themselves into the future, the classroom teacher is ready to introduce units of instruction which would be written to the interests and needs of his/her students and which would identify elements from the instructional model in both categories: FUTURES AND LEADERSHIP.

In order to give the reader a notion of the types of activities which occurred in the Yakima School District's Advanced Learning Center, several sample activities are now depicted for the readers' information. The elements listed in the sample refer to the portions of the future-aimed instructional model which apply to the sample activities. (Figure 1) The total future-aimed instructional model utilizes the identification of a goal, key concepts and corresponding behavioral objectives to measure student understandings. The individual instructional modules relate to the behavioral objectives and provide learning reinforcements which assist the students in achieving the stated competencies.

PLANT ENERGY

ELEMENTS

		Forecasting	Creative Problem Solving
ACTIVITY#1 —	Measurement of emotional reactions of plants.		
Materials	Several houseplants, possibly of Philodendron variety. Galvanometer or lie-detector device (polygraph).		
Time	This activity quite possibly could be accomplished in 40-50 minutes or could extend over a longer period of time depending on how far the teacher wished to pursue the activity and how long the polygraph is available.		
Procedure	The polygraph device would be attached to the plants and the teacher or students would in turn threaten the plant with some real danger such as fire or the cutting of a leaf. The graph would be examined to see if there was any evidence of an emotional reaction.		
Evaluation	Fill out an evaluation sheet at the end of the prescribed time by answering the following questions: 1. If all plants did not react in exactly the same way, what possibilities could account for this? 2. If findings prove that plants are capable of reading minds, devise one possible manner in which this could be used to man's advantage for the future use a brainstorming procedure in a triad to establish your answer.		
Variations	If the teacher wishes to set up long term experiments he she may wish to investigate the February and June, 1971 issues of *Popular Electronics*.		

PLANT ENERGY

		ELEMENTS	
		Futures	Leadership
ACTIVITY #2	Measurement of emotional reaction of plants through the power of psychic energy.	Creative Problem Seeking	Self & Social Action
Materials	Two or three large leaves from the same plant, plate, water. The above needed for each experiment. The teacher may wish to conduct experiments on an individual basis or small groups.		
Time	A few minutes set aside each day over an extended period of time depending upon the successfulness of the experiment.		
Procedure	Place the leaves on a plate with a small amount of water. Students are to choose one leaf on which they wish to concentrate their efforts. Each day they will think about the leaf in loving terms and concentrate on willing this leaf to live. The other leaf they will totally ignore.		
Evaluation	A log sheet will be filled out at the end of the prescribed time. The log sheet is attached.		
	1. What could effect the difference in the rate of dying in the plant leaves?		

LOG

Activity #2 Plant Energy

Observation record:

1. Name of participants:
2. Name of Activity/Experiment:
3. Summary of process followed:
4. Time spent on activity:
5. Summary of results or outcomes:
6. Feeling regarding activity:
7. Comments:

Questions from each activity should also be answered on this sheet.

PYRAMID ENERGY

ELEMENTS

Futures	Leadership

ACTIVITY #1

Construct a pyramid.

Materials — Posterboard or construction paper, ruler, pencils, scissors.

Time — 20 minutes.

Note — Exact measurements are not critical. Research has stated that as long as the finished product resembles a pyramid, the energy generation is present.

Procedure — Draw a base line approximately 9-3/8 inches long. Mark the middle (4-11/16). Draw a line upward from this center mark at least 8 inches long. Now measure a line from one end of the base line so that it meets the center line at 8-7/8 inch. Do the same from the other end so that the shorter sides are touching. Tape the edges together. Stand the pyramid up with the tape on the inside and then tape the last triangle together. You have just constructed a six inch high Cheops model pyramid!

Creative Problem Seeking | Independent Thinking

ACTIVITY #2

What effect does a pyramid have on plants? Set up an experiment to test the theory that pyramids stimulate seed germination.

Materials — Radish seeds, pyramids, flats or two containers for potting soil.

Time — 3-7 days or longer.

Procedure — Use half the seeds as experimental and the other half as control seeds. Prepare enough soil to fill both containers equally. Place the containers as far apart as possible but try to maintain the same amount of sun, air, etc. Have each facing the same direction. Place a pyramid over one of the containers, and then plant an equal number of seeds in each container. Be sure you measure out equal portions of water. Record daily findings. Which plants break through the soil first?

Variations

1. Have students record other variables that might effect the experiment (climate, temperature, ect.)
2. Have students devise other methods for similar experiments.
   a) "Pre-treat" the test seeds under the pyramid for 24 hours. Then plant.
   b) "Pre-treat" the water with pyramid energy. Use normal water on the control seeds.
   c) Do some type of seeds respond better than other types of seeds?
   d) Do some types of pyramids perform more effectively than others?

Questions:

1. What is your evaluation of the results? (What do you think was responsible for these results?)
2. List the similarities and differences between the two groups. Examine the list and explain any effects these might have had jon the results.

In summary, it should be stressed that the sample activities presented in this paper can be easily adapted for use in a variety of instructional settings. They have the capacity to provide the teacher with some simple beginnings toward the development of a bold and imaginative futuristic leadership program for gifted and talented students.